

Application No.: 10/042,394**Docket No.: 713-611****AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (previously presented) A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling a property of said spray jet by metering an accessory liquid into the spray jet;

wherein

said accessory liquid being metered into said spray jet at a location outside said liquid atomizer; and

said coating liquid is a solution of a solvent and said accessory liquid is said solvent.

2. (previously presented) The method as claimed in claim 1, wherein said metering comprises depositing the accessory liquid to a starting zone of the spray jet before said spray jet attains its full diameter.

3. (previously presented) The method as claimed in claim 1, wherein said liquid atomizer has a front end from which said spray jet begins to travel toward the object to be coated; and

said metering comprises depositing said accessory liquid into said spray jet at said front end or at a location in a downstream vicinity of said front end.

4. (previously presented) The method as claimed in claim 1, wherein said metering

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comprises depositing the accessory liquid into the spray jet at a number of locations outside the liquid atomizer, said locations being distributed circumferentially over at least a portion of said spray jet.

5. (canceled)

6. (previously presented) The method as claimed claim 1, wherein said metering comprises depositing the accessory liquid from at least one nozzle aperture which is configured at a front end segment of the spray system, in form of an unbroken jet, to the spray jet.

7. (canceled)

8. (previously presented) A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling the microclimate in said spray jet by metering an accessory liquid into the spray jet;

wherein

said spray system further includes a system component in contact with the coating liquid being delivered to be sprayed in form of said spray jet; and

said method further comprises the step of cooling said system component by a fluidic and cooled coolant, thereby cooling the coating liquid by virtue of thermal conductivity of the system component.

9-14. (canceled)

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15. (currently amended) A coating-liquid spray system, comprising:

a liquid atomizer for spraying a coating liquid in form of a spray jet onto an object to be coated, said liquid atomizer having a front end adapted to face the object to be coated, the front end having an external surface, an internal surface that defines an inner passage for delivering the coating liquid, and an atomizing edge at the boundary of the internal and external surfaces from which atomizing edge the spray jet begins to travel toward the object in operation; and

an accessory-liquid feed unit fitted with at least one discharge outlet for metering an accessory liquid into the spray jet;

wherein

said at least one discharge outlet is located outside said inner passage;

said at least one discharge outlet points towards a location on the external surface of said front end of said liquid atomizer, said location being rearwardly spaced from said atomizing edge, thereby allowing the accessory liquid to be deposited on the external surface and to be guide by the external surface forwardly into the spray jet;

at least one said discharge outlet of the accessory liquid is located radially, outwardly with respect to the external surface of the front end;

~~The system as claimed in claim 14, wherein~~

the liquid atomizer is a rotary atomizing element; and

the accessory-liquid feed unit is configured to drip the accessory liquid onto the external surface of the front end of the rotary atomizing element.

16. (canceled)

17. (previously presented) A coating-liquid spray system, comprising:

a liquid atomizer for spraying a coating liquid in form of a spray jet onto an object to be coated;

an accessory-liquid feed unit fitted with at least one discharge outlet for metering an

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accessory liquid into the spray jet; and

a cooling unit for cooling at least one component of the spray-system by means of a fluid, cooled coolant, said system component being adapted to be in contact with the coating liquid being delivered to be sprayed in form of said spray jet and having a thermal conductivity in order to cool the coating liquid with the coolant.

18. (previously presented) The system as claimed in claim 17, wherein the system component comprises

a first portion which is adapted to be in contact with the coating liquid being delivered to be sprayed in form of said the spray jet; and

a second portion which is not adapted to be in contact with the spray-coating liquid being delivered to be sprayed in form of said the spray jet;

wherein the cooling unit is configured to discharge the coolant on the second portion of the system component.

19. (previously presented) The system as claimed in claim 18, wherein the liquid atomizer is a rotary atomizing element and the first portion adapted to be in contact with the coating liquid is an external, peripheral surface of the rotary atomizing element.

20. (previously presented) The system as claimed in claim 17, wherein the coolant is a cooled gas.

21. (previously presented) The method of claim 1, wherein said metering is performed during said spraying.

22. (previously presented) The method of claim 1, wherein said solvent is water.

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23. (previously presented) The method of claim 1, wherein said metering comprises atomizing said accessory liquid.

24. (previously presented) The method of claim 1, wherein said spray system further includes a system component in contact with the coating liquid being delivered to be sprayed in form of said spray jet;

said method further comprising the step of cooling said system component by a fluidic and cooled coolant, thereby cooling the coating liquid by virtue of thermal conductivity of the system component.

25. (previously presented) The method of claim 8, wherein said controlling comprises adjusting at least one of temperature, moisture content, viscosity of said spray jet by said accessory liquid.

26-28. (canceled)